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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/578,666

05/09/2006

Shigekazu Teranishi

126497

2768

25944

7590

03/05/2009

OLIFF & BERRIDGE, PLC

P.O. BOX 320850

ALEXANDRIA, VA 22320-4850

EXAMINER

NELSON, MICHAEL B

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/578,666	<b>Applicant(s)</b> TERANISHI ET AL.	
	<b>Examiner</b> MICHAEL B. NELSON	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 15-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/09/06; 11/28/06</u> .                                      | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 15-18, 20-28 and 30-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Kazuyoshi et al. (JP 05-185757), see machine translation (a human translation has been requested and will be included with the next office action).

3. Regarding claims 15 and 25, Kazuyoshi et al. discloses a sticking avoidance layer ([0006]) for the back of a substrate which has an ink layer formed on the opposite side ([0003]-[0005]). The anti-stick coating is disclosed as comprising a polydimethylsiloxane copolymer ([0025]-[0026]) and an alkyl group (D) with more than 12 carbon atoms ([0037]-[0040]).

Regarding claims 16-18, 20-28 and 30-34, Kazuyoshi et al. discloses all of the limitations as set forth above. Additionally, Kazuyoshi et al. discloses that the content of component D in relation to the other components that make up the polydimethylsiloxane copolymer (i.e. A, B, and C) is 40% (See example 11, Page 19), which falls within the claimed ranges. The copolymer is a resin [0009] which functions as a binder in that it is bound to the substrate. The copolymer is disclosed as being formed through block polymerization with azo compounds ([0043]-[0044]). Silicon is not found in any of the alkyl groups of component D ([0038]) and only found in component B ([0026]).

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***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 19 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazuyoshi et al. (JP 05-185757), see machine translation (a human translation has been requested and will be included with the next office action) as applied to claims 15 and 25 above, and further in view of Yokoyama et al. (U.S. 6,440,572).

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Regarding claims 19 and 29, Kazuyoshi et al. discloses all of the limitations as set forth above. Kazuyoshi et al. does not specifically disclose graft polymerization as an alternative to block polymerization. Yokoyama et al. is directed towards polydimethylsiloxane anti-stick coatings (See Abstract) and discloses that graft and block polymerization methods were known alternatives (C2, L55-67).

The inventions of both Yokoyama et al. and Kazuyoshi et al. are drawn to the field of polydimethylsiloxane anti-stick coatings and therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the block copolymer of Kazuyoshi et al. by making it a graft copolymer as in Yokoyama et al. because it would amount to nothing more than a use of a known polydimethylsiloxane polymer type for its intended use in a known environment to accomplish an entirely expected result.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL B. NELSON whose telephone number is (571) 270-3877. The examiner can normally be reached on Monday through Thursday 6AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R. Sample/  
Supervisory Patent Examiner, Art Unit 1794

/MN/  
11/03/08